

CLAIMS

I claim:

1. A feed adapter for use in connecting a paintball loader having a loader neck to a paintball gun having a feed tube, the adapter comprising:
at least one connector portion formed on one of the loader neck and the feed tube, the connector portion being configured to receive the other of the
5 loader neck and the feed tube; and
a collet receivable on the connector portion, the collet having a tapered inner surface, wherein movement of the collet along the connector portion compresses the connector portion to form a positive fit between the loader neck and the feed tube.
2. The feed adapter of claim 1 wherein the connector portion includes a series of external threads and the collet includes a series of internal threads formed along its inner surface, wherein the external threads formed on the connector portion engage the internal threads formed on the collet.
3. The feed adapter of claim 2 wherein the connector portion includes a plurality of compression slots, wherein the threaded movement of the collet along the connector portion decreases the diameter of the connector portion.
4. The feed adapter of claim 3 wherein the connector portion is formed on the feed tube of the paintball gun.
5. The feed adapter of claim 3 wherein the connector portion is formed on the loader neck of the paintball loader.

6. The feed adapter of claim 1 wherein the connector portion includes a plurality of compression slots, wherein the movement of the collet along the connector portion decreases the diameter of the connector portion.

7. The feed adapter of claim 6 wherein the connector portion is formed on the feed tube of the paintball gun.

8. The feed adapter of claim 6 wherein the connector portion is formed on the loader neck of the paintball loader.

9. A feed adapter for use in connecting a paintball loader having a loader neck to a paintball gun having a feed tube, the feed adapter comprising:

an elbow adapter having a first connector portion formed on a first end of the elbow adapter and a second connector portion formed on the second end of the elbow adapter, the first connection portion sized to receive the loader neck and the second connector portion sized to receive the feed tube;

a first collet positionable on the first connector portion, the first collet having a tapered inner surface engageable with the first connector portion, wherein movement of the first collet along the first connector portion reduces the diameter of the first connection portion of the elbow adapter; and

a second collet positionable on the second connector portion, the second collet having a tapered inner surface engageable with the second connector portion, wherein movement of the second collet along the second connector portion reduces the diameter of the second connector portion of the elbow adapter.

10. The feed adapter of claim 9 wherein the first connector portion and the second connector portion each include external threads; and

wherein the first collet and the second collet each include internal threads formed along the inner surface of the collet.

11. The feed adapter of claim 9 wherein the first connector portion and the second connector portion of the elbow adapter each include a plurality of compression slots that permit the compression of the respective connector portion by the first and second collets.

12. The feed adapter of claim 9 wherein the elbow adapter is formed from thermoplastic.

13. A feed adapter for use in connecting a paintball loader having a loader neck to a paintball gun having a feed tube, the feed adapter comprising:
an adapter cylinder attachable to the feed tube of the paintball gun, the attachment cylinder being sized to receive the loader neck of the paintball loader, the attachment cylinder including an externally threaded connector portion;
and
a collet receivable on the connector portion of the adapter cylinder, the collet having a tapered inner surface having a series of internal threads formed thereon, wherein movement of the collet along the connector portion compresses the connector portion.

14. The feed adapter of claim 13 further comprising a resilient O-ring positioned along the inner surface of the collet, wherein the resilient O-ring compresses upon insertion of the loader neck of the paintball loader into the collet.

15. The feed adapter of claim 13 wherein the attachment cylinder is press fit within the feed tube formed on the paintball gun.

16. A feed adapter for use in connecting a paintball loader having a loader neck to a paintball gun having a feed tube, the feed adapter comprising:
at least one threaded connector portion formed on one of the loader neck and the feed tube;

5 a collet positionable on the connector portion, the collet having a series of internal threads configured to receive the threaded connector portion; and
 a resilient O-ring positioned along an inner surface of the collet, wherein the resilient O-ring deforms to form a positive fit between the loader neck and the feed tube as the collet is moved along the connector portion.

17. The feed adapter of claim 16 wherein the connector portion is formed on the feed tube of the paintball gun.

18. The feed adapter of claim 16 wherein the collet includes a plurality of O-rings formed along its inner surface.